

Announcement of Special Intensive Lecture

特別集中講義のお知らせ

Advanced Seminar in Architecture

建築学輪講

- [Research methodologies for **interactive buildings**] -

Intensive Lecture Schedule and Room

集中講義日程・教室

✓ 10/10, 10/12, 10/17, 10/19, 10/24, 10/26

✓ 2nd and 3rd periods

✓ Room

- Tue. 2nd at room #12
- Others at room #11

Graduate students

2 Credit

Lecture Room #11/#12

修士・博士課程

2単位

11号/12号講義室



Lecturer

Prof. Ming Qu Purdue University, USA

Ming Qu is a Professor within the Architectural Engineering area at Purdue University's Lyles School of Civil Engineering. Her research focuses on elevating energy efficiency, sustainability, indoor environmental quality, and the holistic well-being and productivity of building occupants. Dr. Qu's work primarily revolves around the innovation and modeling of cutting-edge building materials, intelligent and grid-responsive building systems, and high-performance building energy systems. Her numerous research projects have been funded by the National Science Foundation, Department of Energy, the Environmental Protection Agency, and others. Dr. Qu has authored over 100 peer-reviewed papers and three book chapters. She is now an Associate Editor for two distinguished international journals.

Outline and goals

概要と目標

This course has been designed to empower graduate students with the necessary skills for conducting research effectively. Initially, students will receive an introduction to research methodologies. Subsequently, they will apply these methodologies to the field of interactive buildings, where buildings can engage with occupants, the environment, and the surrounding infrastructure, resulting in improved energy efficiency, enhanced productivity, and well-being. Throughout the duration of the course, students will delve into various facets, including the evolution, emerging trends, and challenges associated with interactive buildings. These subjects will be thoroughly examined from both academic and practical perspectives, providing students with abundant opportunities to grasp the forthcoming advancements in interactive building technologies. The course will encompass a range of activities, including lectures, literature reviews, group discussions, scientific writing, and proposal sessions.

この授業は、大学院生が効果的に研究を行うために必要なスキルを身につけることを目的としています。最初に、研究の方法論についてレクチャーします。その後、ビルが居住者、環境、周囲のインフラと関わりを持つことで、エネルギー効率の改善、生産性の向上、ウェルビーイングを得るインタラクティブ・ビルディングの分野にその方法論を応用します。授業では、インタラクティブ・ビルディングの進化、新たなトレンド、課題等の様々な側面を掘り下げていきます。学術的な観点と実務的な観点の両面から検討され、受講生はインタラクティブ・ビルディングに関する技術のこれからの進歩を把握するための多くの機会を得ることができます。この授業は、レクチャー、文献レビュー、グループディスカッション、科学的執筆、提案セッションなど、様々な活動を含みます。

Evaluation

評価

The evaluation will gauge students' comprehension of the course material and their ability to critically analyze and synthesize existing research literature. It comprises six components: 1) Attendance (5%); 2) Class Participation (10%): active participation in class discussions, group discussions, and peer review sessions; 3) Quality of Sources (5%): the quality of the sources utilized; 4) Peer Review (10%): valuable feedback and assess/critique the work of peers; 5) Research Proposal (20%): the ability to formulate research questions, design a research plan, and justify the importance of the study; and 6) Literature Review Paper (50%): writing skills and the ability to identify relevant sources, critically evaluate them, and synthesize the information into a cohesive narrative.

- 1)出席(5%), 2)授業への参加(10%), 3)情報源の質(5%), 4)ピアレビュー(10%)
5)研究計画書(20%), 6)文献レビュー論文(50%)



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海外大学の授業を本郷で
受けてみませんか？